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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/877,974

Applicant(s)

HOSEA ET AL.

Examiner

ANNAN Q. SHANG

Art Unit

2623

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 100-117, 121-139, 141-143, 145, 149-151, 153-157, 163, 164 and 166-168 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 100-117, 121-139, 141-143, 145, 149-151, 153-157, 163, 164 and 166-168 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Final Drawing (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/25/08 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 121-128, 131-136, 141-143, 145, 149, 151, 153-157, 163-164 and 166- 168 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Herz et al (6,088,722)** in view **Alexander et al (6,177,931)** and further in view of **Yuen et al (7,003,792)**.

Regarding claim 121, **Herz** teaches a system for delivering programs, where each customer has a profile to effectively target programming (Abstract). Accordingly, Herz teaches gathering user requested content from iTV interactions, such as programs requested and watched, correlating content-associated profile information with the user

requested content information, and Herz teaches developing a profile from passive monitoring of watched programs (col. 13, l1.44-52), which equates to the claimed "developing a profile of the user based only on the profiles of the iTV programs accessed by the user."

Herz is silent as to the arrangement of the guide information, i.e., "...guide having a top portion and a bottom portion, the top portion providing programming recommendations based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television..."

In analogous art, **Alexander** teaches systems and methods for displaying TV programs, video, ads information, etc., and further provides a guide information based on preference of the user, displaying top portion and a bottom portion, the top portion providing information based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television (figs.1-9, col.3, line 21-col.4, line 27, col.5, line 56-col.7, line 45, col.14, line48-col.15, line 1+ and col.30, line 45-col.31, line 1+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Herz with the teaching of Alexander to provide various kinds of guide arrangements based on the user's preferences or profile.

Herz as modified by Alexander, is silent on erasing all of the gathered user-

requested content information from iTV interactions once the user's profile is developed, such that the user may not be matched to the gathered user-requested content information.

In analogous art, **Yuen** teaches erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information, in that Yuen teaches collecting viewing and Internet histories and erasing all the raw information on a periodic basis or after integration (col. 4, II. 10-13, col. 5, I1.43-53, col. 7, I1. 1-3), thereby complying with privacy requirements prohibiting central data mining (col. 3-4, II. 61-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information as taught by Yuen in order to protect the privacy of the viewers and complying with privacy requirements prohibiting central data mining (col. 3-4, I1.61-3).

Regarding claim 122, Herz teaches comparing profiles containing demographic information (col. 12, I1.7-25, col. 35, I1.27-29).

Regarding claim 123, Herz teaches demographic information comprising age (col. 49, II. 46-50).

Regarding claim 124, Herz teaches demographic information comprising gender (col. 49, II. 46-50).

Regarding claims 125 and 126, Herz teaches demographic information, but is silent on income and highest attained education level. Official Notice is taken that using income and highest attained education level is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by incorporating income and highest attained education level in order to further target programming towards the users.

Regarding claim 127, Herz teaches comparing profiles containing psychographic information (col. 12, I1.7-25, col. 35, II. 27-29).

Regarding claim 128, Herz teaches psychographic data, but is silent on user's interests. Official Notice is taken that using user interests is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the psychographic data of Herz by acquiring user interests in order to further modify and designate information for the user.

Regarding claim 131, Herz teaches monitoring programs the user views made by the user while watching television (col. 26, I1.20-33).

Regarding claim 132, Herz teaches a set top multimedia terminal (col. 26, II. 20-33), which equates to a set top box.

Regarding claim 133, Herz teaches sending all of the watched programs (e.g. claimed requests) and transmitting the profile and viewing requests to the headend (col. 42, II. 42-63), wherein the headend equates to an iTV Service Provider point of presence.

Regarding claim 134, Herz teaches associating program requests with a user and

storing the program requests in a database (col. 48, ll. 37-51).

Regarding claim 135, Herz teaches updating an existing user profile (fig. 1, step 112).

Regarding claim 136, Herz teaches averaging program viewed to the existing user profile (col. 15, ll. 20-27).

Regarding claim 141, Herz teaches selective advertising (col. 30, ll. 18-38, col. 42, ll. 42-63).

Regarding claim 142, Herz teaches targeted advertising, but is silent on pop-up advertisement to a display. Official Notice is taken that pop-up advertisements are well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using pop-up advertisements in order to diversify the types of advertisements to present to the user thereby enabling the system to further target information to the user.

Regarding claim 143, Herz teaches selective advertising (col. 30, ll. 18-38, col. 42, ll. 42-63), but is silent on explicitly transmitting a video advertisement in the video stream. Official Notice is taken that transmitting a video advertisement in the video stream is well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by transmitting a video advertisement in the video stream in order to provide commercial programming seamlessly to the user for the benefit of better marketing.

Regarding claim 145, Herz teaches clustering, which use viewers with similar profiles and provides recommendations accordingly (col. 12, I. 7-25, col. 35, II. 27-29).

Regarding claim 149, **Herz** teaches a memory for storing a program (col. 46, I. 56-59), and a processor (906, col. 46-47, II. 51-8) operative with the program to gather user requested content from iTV interactions, such as programs requested and watched, correlate content-associated profile information with the user requested content information, and Herz teaches developing a profile from passive monitoring of watched programs (col. 13, II. 44-52), which equates to the claimed "developing a profile of the user based only on the profiles of the iTV programs accessed by the user."

Herz is silent as to the arrangement of the guide information, i.e., "...guide having a top portion and a bottom portion, the top portion providing programming recommendations based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television..."

In analogous art, **Alexander** teaches systems and methods for displaying TV programs, video, ads information, etc., and further provides a guide information based on preference of the user, displaying top portion and a bottom portion, the top portion providing information based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television (figs. 1-9, col.3, line 21-col.4, line 27, col.5, line 56-col.7, line 45, col.14, line48-col.15, line 1+ and col.30, line 45-col.31, line 1+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Herz with the teaching of Alexander to provide various kinds of guide arrangements based on the user's preferences or profile.

Herz as modified by Alexander, is silent on erasing all of the gathered user-requested content information from iTV interactions once the user's profile is developed, such that the user may not be matched to the gathered user-requested content information.

In analogous art, **Yuen** teaches erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information, in that Yuen teaches collecting viewing and Internet histories and erasing all the raw information on a periodic basis or after integration (col. 4, ll. 10-13, col. 5, ll. 43-53, col. 7, ll. 1-3), thereby complying with privacy requirements prohibiting central data mining (col. 3-4, ll. 61-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information as taught by Yuen in order to protect the privacy of the viewers and complying with privacy requirements prohibiting central data mining (col. 3-4, ll. 61-3).

Regarding claim 151, Herz teaches associating program requests with a user and

storing the program requests in a database (col. 48, I1.37-51).

Regarding claim 153, Herz teaches selective advertising (col. 30, II. 18-38, col. 42, II. 42-63).

Regarding claim 154, Herz teaches targeted advertising, but is silent on pop-up advertisement to a display. Official Notice is taken that pop-up advertisements are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using pop-up advertisements in order to diversify the types of advertisements to present to the user thereby enabling the system to further target information to the user.

Regarding claim 155, **Herz** teaches selective advertising (col. 30, I1. 18-38, col. 42, II. 42-63), which is clearly selected from a plurality of advertisements.

Regarding claim 156, Herz teaches a memory for storing a program (col. 46, I1. 56-59), and a processor (906, col. 46-47, I1. 51-8) operative with the program to gather user requested content from iTV interactions, such as programs requested and watched, correlate content-associated profile information with the user requested content information, and Herz teaches developing a profile from passive monitoring of watched programs (col. 13, I1.44-52), which equates to the claimed "developing a profile of the user based only on the profiles of the iTV programs accessed by the user."

Regarding claim 121, **Herz** teaches a system for delivering programs, where each customer has a profile to effectively target programming (Abstract). Accordingly, Herz teaches gathering user requested content from iTV interactions, such as programs requested and watched, correlating content-associated profile information with the user

requested content information, and Herz teaches developing a profile from passive monitoring of watched programs (col. 13, l1.44-52), which equates to the claimed "developing a profile of the user based only on the profiles of the iTV programs accessed by the user."

Herz is silent as to the arrangement of the guide information, i.e., "...guide having a top portion and a bottom portion, the top portion providing programming recommendations based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television..."

In analogous art, Alexander teaches systems and methods for displaying TV programs, video, ads information, etc., and further provides a guide information based on preference of the user, displaying top portion and a bottom portion, the top portion providing information based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television (figs.1-9, col.3, line 21-col.4, line 27, col.5, line 56-col.7, line 45, col.14, line48-col.15, line 1+ and col.30, line 45-col.31, line 1+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Herz with the teaching of Alexander to provide various kinds of guide arrangements based on the user's preferences or profile.

Herz as modified by Alexander, is silent on erasing all of the gathered user-

requested content information from iTV interactions once the user's profile is developed, such that the user may not be matched to the gathered user-requested content information.

In analogous art, Yuen teaches erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information, in that Yuen teaches collecting viewing and Internet histories and erasing all the raw information on a periodic basis or after integration (col. 4, ll. 10-13, col. 5, ll. 43-53, col. 7, ll. 1-3), thereby complying with privacy requirements prohibiting central data mining (col. 3-4, ll. 61-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information as taught by Yuen in order to protect the privacy of the viewers and complying with privacy requirements prohibiting central data mining (col. 3-4, ll. 61-3).

Regarding claim 157, Herz teaches sending all of the watched programs (e.g. claimed requests) and transmitting the profile and viewing requests to the headend (col. 42, ll. 42-63), wherein the headend equates to an iTV Service Provider point of presence.

However, Herz is silent on an ISP point of presence server. Official Notice is taken that the use of an ISP server is well known in the art. Therefore, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using an ISP server in order to facilitate in the communication of Internet data to the user, thereby diversifying and providing additional access to other communication networks.

Regarding claim 163, **Herz** teaches monitoring programs the user views made by the user while watching television (col. 26, ll. 20-33) and Herz teaches developing a profile from passive monitoring of watched programs (col. 13, ll. 44-52), which equates to the claimed "developing a profile of the user based only on the profiles of the iTV programs accessed by the user," wherein the information is stored on a computer readable medium.

Herz is silent as to the arrangement of the guide information, i.e., "...guide having a top portion and a bottom portion, the top portion providing programming recommendations based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television..."

In analogous art, **Alexander** teaches systems and methods for displaying TV programs, video, ads information, etc., and further provides a guide information based on preference of the user, displaying top portion and a bottom portion, the top portion providing information based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television (figs.1-9,

col.3, line 21-col.4, line 27, col.5, line 56-col.7, line 45, col.14, line48-col.15, line 1+ and col.30, line 45-col.31, line 1+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Herz with the teaching of Alexander to provide various kinds of guide arrangements based on the user's preferences or profile.

Herz as modified by Alexander, is silent on erasing all of the gathered user-requested content information from iTV interactions once the user's profile is developed, such that the user may not be matched to the gathered user-requested content information.

In analogous art, **Yuen** teaches erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information, in that Yuen teaches collecting viewing and Internet histories and erasing all the raw information on a periodic basis or after integration (col. 4, ll. 10-13, col. 5, ll.43-53, col. 7, ll. 1-3), thereby complying with privacy requirements prohibiting central data mining (col. 3-4, ll. 61-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information as taught by Yuen in order to protect the privacy of the viewers and

complying with privacy requirements prohibiting central data mining (col. 3-4, I1.61-3).

Regarding claim 164, Herz is silent on computer readable medium is removable memory or a signal transmission. Official Notice is taken that storing programs on removable memory or transmitting a signal is well known in the art, such as storing programs on CD-ROMs or downloading programs over the Internet or cable systems.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by storing programs on removable memory or a signal transmission in order to transmit information thereby enabling plural devices on using the same software thereby creating revenue by distribution.

Regarding claim 166, **Herz** teaches clustering customers together with similar profiles; further Herz teaches presenting programs to a cluster of individuals (col. 30-31, II. 64-24, col. 35, II. 6-29). Herz teaches a system for delivering programs, where each customer has a profile to effectively target programming (Abstract). Herz teaches monitoring programs the user views made by the user while watching television (col. 26, I1.20-33), correlating content-associated profile information with the user requested content information, and Herz teaches developing a profile from passive monitoring of watched programs (col. 13, II. 44-52), which equates to the claimed "developing a profile of the user based only on the profiles of the iTV programs accessed by the user." Herz teaches a system for delivering programs, where each customer has a profile to effectively target programming (Abstract).

Herz is silent on erasing all of the gathered user-requested content information

from iTV interactions once the user's profile is developed, such that the user may not be matched to the gathered user-requested content information.

In analogous art, Yuen teaches erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information, in that Yuen teaches collecting viewing and Internet histories and erasing all the raw information on a periodic basis or after integration (col. 4, l1. 10-13, col. 5, l1.43-53, col. 7, l1. 1-3), thereby complying with privacy requirements prohibiting central data mining (col. 3-4, l1. 61-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information as taught by Yuen in order to protect the privacy of the viewers and complying with privacy requirements prohibiting central data mining (col. 3-4, l1.61-3).

Herz as modified by Yuen, is silent as to the arrangement of the guide information, i.e., "...guide having a top portion and a bottom portion, the top portion providing programming recommendations based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television..."

In analogous art, **Alexander** teaches systems and methods for displaying TV programs, video, ads information, etc., and further provides a guide information based on preference of the user, displaying top portion and a bottom portion, the top portion providing information based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television (figs.1-9, col.3, line 21-col.4, line 27, col.5, line 56-col.7, line 45, col.14, line48-col.15, line 1+ and col.30, line 45-col.31, line 1+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Herz as modified by Yuen with the teaching of Alexander to provide various kinds of guide arrangements based on the user's preferences or profile.

Regarding claim 167, Herz teaches adjusting the target group (col. 49, II. 46-63), which clearly optimizes user responsiveness to the content.

Regarding claim 168, **Herz** teaches a system for delivering programs, where each customer has a profile to effectively target programming (Abstract). Accordingly, Herz teaches Herz teaches developing a profile from passive monitoring of watched programs (col. 6, II. 43-63, col. 12, I1. 9-11, col. 13, I1.44-62), which equates to the claimed only iTV interactions, gathering user requested content from iTV interactions (claimed sniffer), such as programs requested and watched, correlating content-associated profile information with the user requested content information (claimed profiler), and Herz teaches developing a profile from passive monitoring of watched

programs (col. 6, II. 43-63, col. 12, I1.9-11, col. 13, II. 44-62), which equates to the claimed only iTV interactions.

Herz is silent on erasing all of the gathered user-requested content information from iTV interactions once the user's profile is developed, such that the user may not be matched to the gathered user-requested content information.

In analogous art, Yuen teaches erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information, in that Yuen teaches collecting viewing and Internet histories and erasing all the raw information on a periodic basis or after integration (col. 4, II. 10-13, col. 5, I1.43-53, col. 7, I1. 1-3), thereby complying with privacy requirements prohibiting central data mining (col. 3-4, II. 61-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information as taught by Yuen in order to protect the privacy of the viewers and complying with privacy requirements prohibiting central data mining (col. 3-4, II. 61-3).

Herz as modified by Yuen, is silent as to the arrangement of the guide information, i.e., "...guide having a top portion and a bottom portion, the top portion providing programming recommendations based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number,

where the interactive programming guide automatically appears when the user turns on a television..."

In analogous art, **Alexander** teaches systems and methods for displaying TV programs, video, ads information, etc., and further provides a guide information based on preference of the user, displaying top portion and a bottom portion, the top portion providing information based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television (figs.1-9, col.3, line 21-col.4, line 27, col.5, line 56-col.7, line 45, col.14, line48-col.15, line 1+ and col.30, line 45-col.31, line 1+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Herz as modified by Yuen with the teaching of Alexander to provide various kinds of guide arrangements based on the user's preferences or profile.

4. Claims 100-103, 108-110, 116, 117, 129, 130, and 150 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Herz et al (6,088,722)** in view of **Hendricks et al (5,659,350)** further in view of **Yuen et al. (7,003,792)** and further in view of **Alexander et al (6,177,931)**.

Regarding claim 100, **Herz** teaches a system for delivering programs, where each customer has a profile to effectively target programming (Abstract). Accordingly, Herz teaches gathering user requested content from ITV interactions, such as programs

requested and watched, correlating content-associated profile information with the user requested content information, and Herz teaches developing a profile from passive monitoring of watched programs (col. 6, ll. 43-63, col. 12, ll. 9-11, col. 13, ll. 44-62), which equates to the claimed only iTV interactions.

Herz teaches correlating the user profiles with other users (such as a clustering technique), but is silent on correlating the data with profile information from a rating service.

In analogous art, **Hendricks** teaches correlating data with a viewer ratings service database (col. 16, ll. 57-60), which equates to profile information from a rating service database.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using a viewer ratings service database as taught by Hendricks in order to correlate buy information from existing programs to determine the outcome of programs within a particular genre not in the current line-up (Hendricks: col. 16, ll. 56-60), thereby increasing the revenue for the system.

Herz is silent on erasing all of the gathered user-requested content information from iTV interactions once the user's profile is developed, such that the user may not be matched to the gathered user-requested content information.

In analogous art, **Yuen** teaches erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information, in that Yuen teaches collecting viewing and Internet histories and erasing all the raw information on a

periodic basis or after integration (col. 4, ll. 10-13, col. 5, ll. 43-53, col. 7, ll. 1-3), thereby complying with privacy requirements prohibiting central data mining (col. 3-4, ll. 61-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information as taught by Yuen in order to protect the privacy of the viewers and complying with privacy requirements prohibiting central data mining (col. 3-4, ll. 61-3).

Herz as modified by Hendricks and Yuen, is silent as to the arrangement of the guide information, i.e., "...guide having a top portion and a bottom portion, the top portion providing programming recommendations based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television..."

In analogous art, **Alexander** teaches systems and methods for displaying TV programs, video, ads information, etc., and further provides a guide information based on preference of the user, displaying top portion and a bottom portion, the top portion providing information based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television (figs. 1-9,

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col.3, line 21-col.4, line 27, col.5, line 56-col.7, line 45, col.14, line48-col.15, line 1+ and col.30, line 45-col.31, line 1+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Herz as modified by Hendricks and Yuen with the teaching of Alexander to provide various kinds of guide arrangements based on the user's preferences or profile.

Regarding claim 101, Herz teaches comparing profiles containing demographic information (col. 12, I1.7-25, col. 35, I1.27-29).

Regarding claim 102, Herz teaches comparing profiles containing psychographic information (col. 12, I1.7-25, col. 35, I1.27-29).

Regarding claim 103, Herz teaches the user-requested content is television programming (col. 6, I1.54-59).

Regarding claim 108, Herz teaches providing advertisements (col. 30, I1.31-38).

Regarding claim 109, Herz teaches providing advertisements based on the user profiles (col. 30, I1.31-38).

Regarding claim 110, Herz teaches providing program recommendations based on the profile (col. 24, I1.50-62).

Regarding claim 116, **Herz** teaches a memory for storing a program (col. 46, II. 56-59), and a processor (906, col. 46-47, I1.51-8) operative with the program to gather user requested content from iTV interactions, such as programs requested and watched, correlate content-associated profile information with the user requested content information, and Herz teaches developing a profile from passive monitoring of

watched programs (col. 6, ll. 43-63, col. 12, ll. 9-11, col. 13, ll. 44-62), which equates to the claimed only iTV interactions.

However, Herz teaches correlating the user profiles with other users (such as a clustering technique), but is silent on correlating the data with profile information from a rating service.

Hendricks teaches correlating data with a viewer ratings service database (col. 16, ll. 57-60), which equates to profile information from a rating service database. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using a viewer ratings service database as taught by Hendricks in order to correlate buy information from existing programs to determine the outcome of programs within a particular genre not in the current line-up (Hendricks: col. 16, ll. 56-60), thereby increasing the revenue for the system.

Herz is silent on erasing all of the gathered user-requested content information from iTV interactions once the user's profile is developed, such that the user may not be matched to the gathered user-requested content information.

In analogous art, **Yuen** teaches erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information, in that Yuen teaches collecting viewing and Internet histories and erasing all the raw information on a periodic basis or after integration (col. 4, ll. 10-13, col. 5, ll. 43-53, col. 7, ll. 1-3), thereby complying with privacy requirements prohibiting central data mining (col. 3-4, ll. 61-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information as taught by Yuen in order to protect the privacy of the viewers and complying with privacy requirements prohibiting central data mining (col. 3-4, l1. 61-3).

Herz as modified by Hendricks and Yuen, silent as to the arrangement of the guide information, i.e., "...guide having a top portion and a bottom portion, the top portion providing programming recommendations based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television..."

In analogous art, **Alexander** teaches systems and methods for displaying TV programs, video, ads information, etc., and further provides a guide information based on preference of the user, displaying top portion and a bottom portion, the top portion providing information based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television (figs.1-9, col.3, line 21-col.4, line 27, col.5, line 56-col.7, line 45, col.14, line48-col.15, line 1+ and col.30, line 45-col.31, line 1+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Herz as modified by Hendricks

and Yuen with the teaching of Alexander to provide various kinds of guide arrangements based on the user's preferences or profile.

Regarding claim 117, Herz teaches a memory for storing a program (col. 46, l1. 56-59), and a processor (906, col. 46-47, l1.51-8), which clearly has a computer readable medium in order to process the instructions in the processor. Herz teaches gathering user requested content from iTV interactions, such as programs requested and watched, correlating content-associated profile information with the user requested content information, and Herz teaches developing a profile from passive monitoring of watched programs (col. 6, ll. 43-63, col. 12, l1. 9-11, col. 13, ll. 44-62), which equates to the claimed only iTV interactions.

However, Herz teaches correlating the user profiles with other users (such as a clustering technique), but is silent on correlating the data with profile information from a rating service.

Hendricks teaches correlating data with a viewer ratings service database (col. 16, l1.57-60), which equates to profile information from a rating service database.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using a viewer ratings service database as taught by Hendricks in order to correlate buy information from existing programs to determine the outcome of programs within a particular genre not in the current line-up (Hendricks: col. 16, l1.56-60), thereby increasing the revenue for the system.

Herz is silent on erasing all of the gathered user-requested content information from iTV interactions once the user's profile is developed, such that the user may not be

matched to the gathered user-requested content information. In analogous art, Yuen teaches erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information, in that Yuen teaches collecting viewing and Internet histories and erasing all the raw information on a periodic basis or after integration (col. 4, ll. 10-13, col. 5, ll. 43-53, col. 7, ll. 1-3), thereby complying with privacy requirements prohibiting central data mining (col. 3-4, ll. 61-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by erasing all of the gathered user-requested content information from iTV interactions after developing the user's profile, such that the user may not be matched to the gathered user-requested content information as taught by Yuen in order to protect the privacy of the viewers and complying with privacy requirements prohibiting central data mining (col. 3-4, ll. 61-3).

Herz as modified by Hendricks and Yuen, silent as to the arrangement of the guide information, i.e., "...guide having a top portion and a bottom portion, the top portion providing programming recommendations based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television..."

In analogous art, **Alexander** teaches systems and methods for displaying TV programs, video, ads information, etc., and further provides a guide information based on preference of the user, displaying top portion and a bottom portion, the top portion

providing information based on the profile of the user, the bottom portion providing a standard guide in numeric order based on the channel number, where the interactive programming guide automatically appears when the user turns on a television (figs.1-9, col.3, line 21-col.4, line 27, col.5, line 56-col.7, line 45, col.14, line48-col.15, line 1+ and col.30, line 45-col.31, line 1+).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Herz as modified by Hendricks and Yuen with the teaching of Alexander to provide various kinds of guide arrangements based on the user's preferences or profile.

Regarding claim 129, Herz teaches correlating the user profiles with other users (such as a clustering technique), but is silent on providing a database associating programs with demographic characteristics who have accessed programs (wherein sites equates to programs).

Hendricks teaches correlating data with a viewer ratings service database (col. 16, ll.57-60), which equates to profile information from a rating service database.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using a viewer ratings service database as taught by Hendricks in order to correlate buy information from existing programs to determine the outcome of programs within a particular genre not in the current line-up (Hendricks: col. 16, ll. 56-60), thereby increasing the revenue for the system. Herz and Hendricks teaches a ratings database correlating user profiles with other profiles, but Herz and Hendricks are silent on teaching a database with demographic information.

Official Notice is taken that having a database with demographic information is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Herz and Hendricks by using demographic information in the database in order to further establish the types of programming available to the user.

Regarding claim 130, Herz teaches correlating the user profiles with other users (such as a clustering technique), but is silent on correlating the data with profile information from a rating service. Hendricks teaches correlating data with a viewer ratings service database (col. 16, ll. 57-60), which equates to profile information from a rating service database.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using a viewer ratings service database as taught by Hendricks in order to correlate buy information from existing programs to determine the outcome of programs within a particular genre not in the current line-up (Hendricks: col. 16, ll. 56-60), thereby increasing the revenue for the system.

Regarding claim 150, Herz teaches correlating the user profiles with other users (such as a clustering technique), but is silent on providing a database associating programs with demographic characteristics who have accessed programs (wherein sites equates to programs).

Hendricks teaches correlating data with a viewer ratings service database (col. 16, ll. 57-60), which equates to profile information from a rating service database.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using a viewer ratings service database as taught by Hendricks in order to correlate buy information from existing programs to determine the outcome of programs within a particular genre not in the current line-up (Hendricks: col. 16, l1.56-60), thereby increasing the revenue for the system.

Herz and Hendricks teaches a ratings database correlating user profiles with other profiles, but Herz and Hendricks are silent on teaching a database with demographic information. Official Notice is taken that having a database with demographic information is well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Herz and Hendricks by using demographic information in the database in order to further establish the types of programming available to the user.

5. Claims 104-107 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Herz et al (6,088,722)** in view of **Hendricks et al. (5,659,350)** in view of **Yuen et al (7,003,792)** in view of **Alexander et al (6,177,931)** as discussed above, and further in view of **Strubbe (5,223,924)**

Regarding claim 104, Herz teaches the database being stored at the headend (col. 48, ll. 37-51), wherein the database associates a plurality of programs with content associated profile information of viewers (col. 25, ll. 45-64, fig. 1), but Herz and Hendricks are silent on receiving the database. Strubbe teaches downloading data into

a database into the memory section (52, col. 4, ll. 17-26), which equates to receiving the database. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz, Hendricks, Yuen and Alexander with the teaching of Strubbe by receiving the database as taught by Strubbe in order to create a customized TV program database containing only programs of interest to the viewer (col. 2, ll. 6-8).

Regarding claim 105, the combination of Herz, Hendricks, and Strubbe teaches using a viewer ratings service database, which is clearly developed by a television program rating service.

Regarding claim 106, Herz teaches gathering information on program requests made by the user while watching television (col. 6, ll. 58-59).

Regarding claim 107, Herz teaches using weightings using an averaging algorithm (col. 15, ll. 21-27).

6. Claims 111-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over **U.S. Patent 6,088,722 to Herz et al.**, **U.S. Patent 5,659,350 to Hendricks et al. (Hendricks)**, and **U.S. Patent 7,003,792 to Yuen et al. (Yuen)** in view of **Alexander et al (6,177,931)** and further in view of **U.S. Patent 5,848,396 to Gerace**.

Regarding claim 111, Herz teaches the database being stored at the headend (col. 48, ll. 37-51), wherein the database associates a plurality of programs with content associated profile information of viewers (col. 25, ll. 45-64, fig. 1). Herz is silent on a URL as user-requested information. Gerace teaches building a profile and receiving a

URL of the previously viewed web page and storing cookies (col. 6, II. 48-52; col. 13-14, I1.36-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Herz, Hendricks, Yuen and Alexander by using web-sites (URLs) as user requested information as taught by Gerace in order to provide targeted marketing to the user (Gerace: col. 2, I1.30-34).

Regarding claim 112, Herz teaches the database being stored at the headend (col. 48, II. 37-51), wherein the database associates a plurality of programs with content associated profile information of viewers (col. 25, II. 45-64, fig. 1). Herz is silent on associating a plurality of URLs with profile information of users; Gerace teaches transmitting advertisements with contain URL for the advertisers depending on the selected programming, as discussed in the combination presented in claim 12.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using web-sites (URLs) as user requested information as taught by Gerace by storing the received data in the database of Herz in order to provide targeted marketing to the user (Gerace: col. 2, I1.30-34).

Regarding claim 113, Herz and Gerace are silent on Web site rating service. Official Notice is taken that the use of a Web site rating service is well known.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz and Gerace by using a web site rating service in order to accurately determine the content of the web-sites frequented by the user, thereby acquiring more detailed information of the user to better target the user

with relevant programming and information.

Regarding claim 114, Herz teaches gather user-requested content of programs watched (col. 6, 11.43-63). Herz is silent on gathering URL information; Gerace teaches using a URL to help target advertisements (col. 6, 11.48-52; col. 13-14, 11. 36-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by gathering URL information as taught by Gerace in order to provide targeted marketing to the user (Gerace: col. 2, 11. 30-34).

Regarding claim 115, Herz teaches using weightings using an averaging algorithm (col. 15, 11. 21-27). Herz is silent on combining the URL into the search. Gerace teaches using a URL to help target advertisements (col. 6, 11. 48-52; col. 13-14, 11. 36-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herz by using weighting with the URLs of Gerace in order to provide a comprehensive profile of the user thereby providing more targeted marketing to the user (Gerace: col. 2, 11.30-34).

7. Claims 137-139 and 147 are rejected under 35 U.S.C. 103(a) as being unpatentable over **U.S. Patent 6,088,722 to Herz et al. (Herz)** and **U.S. Patent 7,003,792 to Yuen et al. (Yuen)** in view of **Alexander et al (6,177,931)** and further in view of **U.S. Patent 6,005,597 to Barrett et al. (Barrett)**.

Regarding claim 137, Herz teaches demographic categories associated with ratings (col. 12, 11.7-25, col. 35, 11. 27-29), but is silent on confidence measures, such

as filling in a value for a rating of a demographic category having a low confidence measure. Barrett teaches correlating interests and confidence of the information (fig. 3, col. 5, ll. 51-57), which reads on filling in a value for a rating of a demographic category having a low confidence measure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify system of Herz, Yuen and Alexander by correlating interests and confidence of the information as taught by Barrett in order to further provide available information to the user, while targeting information of high desirability to the user.

Regarding claim 138, Herz teaches clustering customers together with similar profiles, further Herz teaches presenting programs to a cluster of individuals even when it may not match their particular profile (col. 30-31, ll. 64-24, col. 35, ll.6-29), which equates to substituting information from another profile when there exists a low confidence measure. Herz teaches performing this feature independent of confidence measures (e.g. when confidence is high and when confidence is low).

Regarding claim 139, Herz teaches clustering customers together with similar profiles, further Herz teaches presenting programs to a cluster of individuals even when it may not match their particular profile (col. 30-31, ll.64-24, col. 35, ll.6-29),

Regarding claim 147, Herz is silent on providing program recommendations when the television is turned on. Barrett teaches providing program recommendations when the television is turned on (col. 4, ll. 15-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

Herz by providing program recommendations when the television is turned on as taught by Barrett in order to facilitate the user in selecting programming.

Response to Arguments

8. Applicant's arguments with respect to claims 100-117, 121-139, 141-143, 145, 149-151, 153-157, 163, 164 and 166-168 have been considered but are moot in view of the new ground(s) of rejection. The amendment to the claims necessitated the new ground(s) of rejection discussed above. **This office action is non-final.**

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ellis et al (2005/0028208) disclose interactive TV program guide with remote access.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ANNAN Q. SHANG** whose telephone number is **(571)272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

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/Annan Q Shang/
Primary Examiner, Art Unit 2623